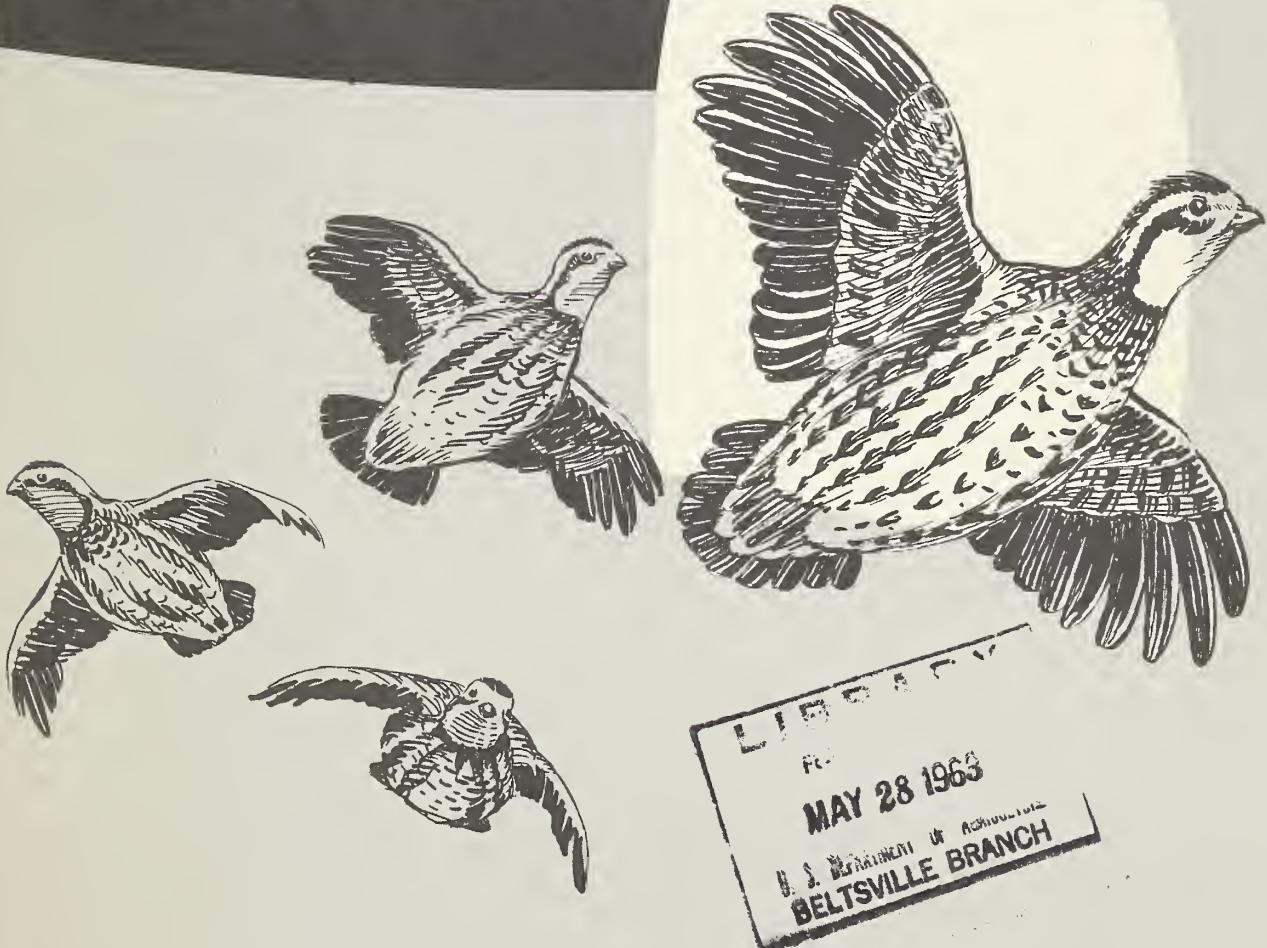


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More Wildlife THROUGH SOIL AND WATER Conservation



Agriculture Information Bulletin No. 175
SOIL CONSERVATION SERVICE
U. S. DEPARTMENT OF AGRICULTURE

More Wildlife

THROUGH SOIL AND WATER

Conservation



By Wallace L. Anderson and Lawrence V. Compton, biologists, Soil Conservation Service

The rabbits, grouse, quail, pheasants, doves, and other wildlife grown on farms and ranches provide most of our hunting. Even much big game such as deer, antelope, and wild turkey comes from privately owned lands.

Most of our wildlife crop is grown and harvested on land used mainly for cultivated crops, livestock, or wood products. This means that farmers and ranchers are the key to abundant wildlife. Much of our fishing is also affected by the way farmers and ranchers manage their land.

Farms and ranches make up 59 percent of the land in the United States mainland. Most of this land is in soil conservation districts.

These districts are run by farmers under State law. Altogether, more than 85 percent of our hunting land is privately owned or controlled.

The land use decisions of farmers and ranchers can cause an abundance or a scarcity of wildlife. The choice is largely theirs.

The Soil Conservation Service, as part of its assistance to soil conservation districts and watershed projects, helps individual land operators apply many soil and water conservation practices that increase wildlife.

Nearly all of the 1,944,644 farmers and ranchers cooperating with soil conservation districts have applied at least one practice helpful to wildlife.





Stripcropped fields attract about twice as many ground nesting birds as undivided fields. This happens because stripcropped fields have more "edge" where food and cover are close together.

Farmers are applying stripcropping at the rate of about 665,000 acres a year.



Farm ponds that are properly designed and constructed can produce 100 to 300 pounds of fish per acre each year for hook-and-line fishing. Farmers in soil conservation districts stock about 50,000 fishponds annually. Fish can be obtained from the United States Fish and Wildlife Service, State fish and game agencies, and commercial hatcheries.



Stock-water ponds fenced and planted to grasses, legumes, shrubs, and trees increase upland game by providing water, food, and homesites.

In Missouri a study of 91 ponds showed that 90 species of birds and 10 species of mammals lived in the immediate vicinity. There were cottontail rabbits at 85 percent of the ponds, doves at 65 percent, muskrats at 63 percent, and bobwhite quail at 55 percent.



West of the Missouri River in South Dakota, a study showed that 40,000 manmade ponds containing about 100,000 acres of water harbored 141,000 ducks. These ponds established a new population of ducks in the area.

Farmers in soil conservation districts build about 58,000 of these different kinds of ponds annually.



Field borders between cropland and woodland are often unproductive and badly eroded. If planted to adapted shrubs, they will produce wildlife. In the Southeast, bicolor lespedeza does particularly well on these field borders. Observations by the Soil Conservation Service show that the seeds of this plant are high-quality food for bobwhite quail.



In the Midwest, sloping ends of contoured and strip-cropped fields are often seeded to grasses and legumes to protect areas that formerly eroded severely. When not mowed until after small-grain harvest, they provide undisturbed nesting cover for ring-necked pheasants.





Windbreaks of trees and shrubs are planted on farms and ranches in the Great Plains and in many other areas where farmsteads, crops, and livestock need protection from damaging winds. These windbreaks provide food and cover for many kinds of wildlife. They are one of the favorite nesting places of the mourning dove.

Windbreaks are planted at the rate of 4,300 miles per year by farmers and ranchers in soil conservation districts.



Hedges, including living fences of multiflora rose, are becoming a common sight in the Midwest and Northeast. They are often used to separate pasture from cropland and are especially useful for irregular contour fences around ponds or gullies and along streambanks.

Hedges provide travel lanes for many kinds of wildlife and are used as homesites by birds, small mammals, and predaceous insects that help control insect pests. Hedges are being planted at the rate of 2,000 miles a year.





Planting trees—especially evergreens in places where there will be a good grass cover for a few years—creates ideal habitat for cottontail rabbits and other kinds of wildlife.

Plantings of Christmas trees are particularly valuable for wildlife since the trees are harvested before they are large enough to shade out all the grass cover.

Soil conservation district cooperators are planting trees at the rate of 910,000 acres a year.



On many farms, improving pastures in such ways as by planting and fertilizing makes it possible to keep livestock from grazing steep woodlands. The companion practices of tree planting and pasture improvement benefit many kinds of woodland wildlife, including deer, wild turkey, and ruffed grouse.

Pasture planting is applied on about 2,800,000 acres annually in districts.



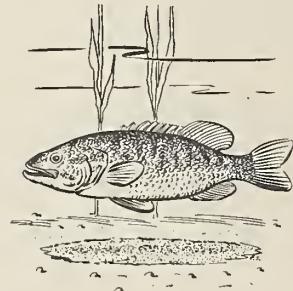
Grazing and browsing animals share the grass and woody plants in the open spaces of the West. Most of the animals are beef cattle, but some of them are prized wildlife—antelope, deer, and elk.

Much progress has been made in the last 20 years in managing vegetation and grazing animals for both livestock and game production without damaging the range.



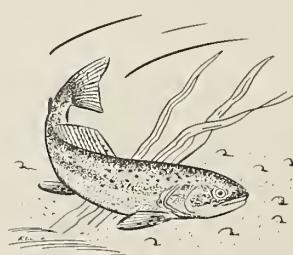


Watershed-protection and flood-prevention projects improve habitat for stream fish. They cut down on silt, which is one of the most serious pollutants of our fishing waters. Silt covers spawning beds, damages the gills of the fish, and covers the rocks, plants, and gravel that support insect larvae and other fish foods.



Stream improvement for fish starts with protecting the land upon which the rain falls. This includes protecting croplands, grazing lands, and woodlands from erosion.

Sometimes structures are needed to retard the runoff. Streambanks, too, must be protected from erosion.



Better fishing is one important result of watershed protection.

The first projects under the Watershed Protection and Flood Prevention Act were approved for operation in 1956. It is estimated about 100 new projects will be approved for operation each year.



Soil surveys help farmers make decisions regarding the use of their wetlands. The Soil Conservation Service helps interested land-owners install measures that will increase the wildlife productivity of marshes and other natural wetlands. These measures include impoundments, level ditching, water-level controls, controlled burning, regulated grazing, and planting.





“Odd areas” on farms and ranches can be managed for wildlife. “Odd areas” are such places as fence corners, rocky spots, bare knobs, blowouts, sinkholes, borrow pits, abandoned roads, and good land isolated by ditches, streams, and gullies.

“Odd areas” are fenced to protect them from grazing; they are also protected from fire. Where necessary, trees, shrubs, and other plants that provide wildlife food and cover are planted.

Although these “odd areas” are usually small, they occur on many farms and ranches and total about 10 million acres for the whole country.



More wildlife is a result of applying soil and water conservation practices in a unique partnership. The *individual* farmer or rancher gets help from a *local governmental unit*—the soil conservation district—which in turn, is assisted by *State and Federal agencies*, including the Soil Conservation Service.

The Soil Conservation Service was created by Congress because soil and water conservation and the land use problems that go hand in hand with conservation are national in scope and require a national program to deal with them most effectively. The States authorized the creation of soil conservation districts by law to give local direction to the job.



In working with soil conservation district cooperators, the Soil Conservation Service encourages the production of wildlife. In this phase of its work, SCS works closely with State and other Federal agencies.





Wildlife habitat is enduring and inexpensive when it is part of a basic plan for soil and water conservation and sound land use. The Soil Conservation Service helps farmers and ranchers in soil conservation districts to make such basic plans. As a regular part of this assistance, SCS soil conservationists help district cooperators put wildlife-habitat improvements on all their land—cropland, pasture, range, and

woodland. Aiding the soil conservationists are SCS wildlife biologists and other specialists including agronomists, range conservationists, woodland conservationists, engineers, and soil scientists.

Soil conservation districts and their farmer and rancher cooperators also receive help in applying the wildlife phases of their conservation plans from State game and fish agencies.





Since most of our wildlife is produced on farm and ranch land that is used primarily for cultivated crops, livestock, or wood products, decisions regarding the wildlife crop can be made only by the farmers and ranchers. The production of fish and game is an elective to be accepted or rejected as the land operator desires.

As our population increases and land use becomes more intensive, planned production of wildlife will become more and more important in meeting the demand for this crop. Obviously, farmers and ranchers deserve the respect and cooperation of the hunter and fisherman.

IN BRIEF

Wildlife is a crop of the land.

Hunting and fishing opportunities are affected by the way farmers and ranchers manage their land.

When farmers and ranchers practice soil and water conservation, more wildlife results.

Evidences that farmers and ranchers are practicing soil and water conservation are:

- Stripcropping
- Pond construction
- Field borders
- Windbreaks
- Hedges
- Tree planting
- Pasture improvement
- Woodland protection
- Range improvement
- Watershed protection
- Marsh management
- “Odd area” development

Only farmers and ranchers can make effective decisions regarding wildlife production on their land.

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